marantz®

Model SD535 User Guide

Stereo Cassette Deck

ENGLISH

WARRANTY
For warranty information, contact your local Marantz distributor.

RETAIN YOUR PURCHASE RECEIPT
Your purchase receipt is your permanent record of a valuable purchase. It should be kept in a safe place to be referred to as necessary for insurance purposes or when corresponding with Marantz.

IMPORTANT
When seeking warranty service, it is the responsibility of the consumer to establish proof and date of purchase. Your purchase receipt or invoice is adequate for such proof.

FOR U.K. ONLY
This undertaking is in addition to a consumer's statutory rights and does not affect those rights in any way

FRANÇAIS

GARANTIE
Pour des informations sur la garantie, contacter le distributeur local Marantz.

CONSERVER L'ATTESTATION D'ACHAT
L'attestation d'achat est la preuve permanente d'un achat de valeur. La conserver en lieu sur pour s'y reporter aux fins d'obtention d'une couverture d'assurance ou dans le cadre de correspondances avec Marantz.

IMPORTANT
Pour l'obtention d'un service couvert par la garantie, il incombe au client d'établir la preuve de l'achat et d'en corroborer la date. Le reçu ou la facture constituent des preuves suffisantes.

DEUTSCH

GARANTIE
Bei Garantiefragen wenden Sie sich bitte an Ihren Marantz-Händler.

HEBEN SIE IHRE QUITTING GUT AUF
Die Quittung dient Ihnen als bleibende Unterlage für Ihren wertvollen Einkauf Das Aufbewahren der Quittung ist wichtig, da die darin enthaltenen Angaben für Versicherungswecke oder bei Korrespondenz mit Marantz angeführt werden müssen.

WICHTIG!
Bei Garantiefragen muß der Kunde eine Kaufunterlage mit Kaufdatum vorlegen. Ihren Quittung oder Rechnung ist als Unterlage ausreichend.

NEDERLANDS

GARANTIE
Voor inlichtingen omtrent garantie dient u zich tot uw plaatselijke Marantz.

UW KWITANTIE, KASSABON E.D. BEWAREN
Uw kwitantie, kassabon e.d. vormen uw bewijs van aankoop van een waardevol artikel en dienen op een veilige plaats bewaard te worden voor evt, verwijzing bijv, in verbend met verzekering of bij correspondentie met Marantz.

BELANGRIJK
Bij een evt, beroep op de garantie is het de verantwoordelijkheid van de consument een gedateerd bewijs van aankoop te tonen. Uw kassabon of factuurzijn voldoende bewijs.

ESPAÑOL

GARANTIA
Para obtener información acerca de la garantia póngase en contacto con su distribuidor Marantz.

GUARDE SU RECIBO DE COMPRA
Su recibo de compra es su prueba permanente de haber adquirido un aparato de valor, Este recibo deberá guardarlo en un lugar seguro y utilizarlo como referencia cuando tenga que hacer uso del seguro o se ponga en contacto con Marantz.

IMPORTANTE
Cuando solicite el servicio otorgado por la garantia el usuario tiene la responsabilidad de demonstrar cuándo efectuó la compra. En este caso, su recibo de compra será la prueba apropiada.

ITALIANO

Condizioni di garanzia
L'apparecchio e' garantito per 365 giorni dalla data di acquisto comprovata da un documento attestante il nominativo del rivenditore e la data di vendita. La garanzia sara' prestata con la sostituzione o riparazione gratuita delle parti difettose.

Non sono coperti da garanzia difetti derivanti da uso improprio, errata installazione, manutenzione effettuata da personale non autorizzato o, comunque, da circostanze che non possano riferirsi a difetti di tunzionamento dell'apparecchio. Sono inoltre esclusi dalla garanzia gli interventi inerenti l'installazione e l'allacciamento agli impianti di alimentazione.

Gli apparecchi verranno riparati presso i nostri Centri di Assistenza. Le spese ed i rischi di trasporto sono a carico del cliente.

La casa costruttrice declina ogni responsabilita' per danni diretti o indiretti provocati dalla inosservanza delle prescrizioni di installazione, uso e manutenzione dettagliate nel presente manuale.

Per informazioni sull'abbonamento al Servizio Assistenza postgaranzia e per conoscere l'indirizzo dei Centri Assistenza Marantz rivolgetevi al nostro servizio consumatori (telefono 1678-20026 - numero verde).

PORTUGUÊS

GARANTIA
Para informações sobre a garantia, contactar o distribuidor Marantz local.

GUARDAR O RECIBO DE COMPRA
O recibo é o registo permanente da compra que fez. Deve ser guardado num local seguro, para ser apresentado em questões relacionadas com o seguro ou para quando tiver de contactar a Marantz.

IMPORTANTE
Quando procurar assisténcia técnica ao abrigo da garantia, é da responsabilidade do consumidor estabelecer a prova e data de compra. O recibe é prova adequada.

SVENSKA

GARANTI
För information om garantin, kontakta Marantz lokalagent.

SPAR KVITTOT
Kvittot är ett inköpsbevis på en värdefull vara. Det skall förvaras säkert och hänvisas till vid försäkringsfall eller vidkorrespondens mod Marantz.

VIKTIGT
Fö att garantin skall gälla är det kundens sak att framställa bevis och datum om köpet. Kvitto eller faktura är tillräokligt bevis fö detta.

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ENGLISH:	This unit meets the requirements of EEC Recommendation 82/499.
FRANÇAIS:	Cet appareil est conforme aux directives 82/499 de la CEE.
DEUTSCH:	Dises Gerät entspricht der EWG-Empfehlung 82/499.
NEDERLANDS:	Dit apparaat voldoet aan de eisen van Aanbeveling EEG 82/499.
ESPAÑOL:	Este aparato cumple los requisitos establecidos en la directiva 82/499 de la CEE.
ITALIANO:	Questo apparecchio è conforme ai requisiti della direttiva CEE 82/499.
PORTUGUÊS:	Esta unidade foi concebida e manufacturada em conformidade com a Recomendação 82/499 da Comunidade Económica Europeia.
SVENSKA:	Denna apparat överenstämmer med bestämmelsema i EEC 82/499.

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation.

HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol ⧈ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

ENGLISH

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FOREWORD

This section must be read before any connection is made to the mains supply.

WARNINGS

Do not expose the equipment to rain or moisture.

Do not remove the cover from the equipment.

Do not push anything inside the equipment through the ventilation holes.

Do not handle the mains lead with wet hands.

MAINS VOLTAGE SETTING

Your Marantz product has been designed to comply with the household power and safety requirements in your area.

The /02 version product can be powered by 230 V AC only.

The /05 or /07 versions product can be powered by 240 V AC only.

On the rear panel of the /01 version product, a voltage selector (2-position) is provided. Be sure to set the voltage selector to the mains voltage of your area before using the unit.

IMPORTANT:

This apparatus is fitted with an approved moulded 13 Amp plug. To change a fuse in this type of plug proceed as follows:

1. Remove fuse cover and fuse.
2. Fix new fuse which should be a BS1362 5A, A.S.T.A. or BSI approved type.
3. Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place.

If the mains plug contains a fuse, this should have a value of 5A. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5A.

NOTE:

The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13A socket elsewhere.

HOW TO CONNECT A PLUG

The wires in the mains lead are coloured in accordance with the following code:

BLUE—"NEUTRAL" ("N")

BROWN—"LIVE" ("L")

1. The BLUE wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
2. The BROWN wire must be connected to the terminal which is marked with the letter "L" or coloured RED.
3. Do not connect either wires to the earth terminal in the plug which is marked by the letter "E" or by the safety earth symbol ⏚ or coloured green or green-and-yellow.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead — not simply over the two wires.

COPYRIGHT

Recording and playback of any material may require consent. For further information refer to the following:

— Copyright Act 1956
— Dramatic and Musical Performers Act 1958
— Performers Protection Acts 1963 and 1972
— any subsequent statutory enactments and orders.

ABOUT THIS USER GUIDE

Refer to the diagrams on page 60 at the rear of this user guide. The numbers on the diagrams correspond to those in the text. All references to the connections and controls that are printed in BOLD type are as they appear on the unit.

PRECAUTIONS

The following precautions should be taken when operating the equipment.

GENERAL PRECAUTIONS

When siting the equipment ensure that:

— the ventilation holes are not covered;
— air is allowed to circulate freely around the equipment
— it is on a vibration free-surface;
— it will not be exposed to interference from an external source;
— it will not be exposed to excessive heat, cold, moisture or dust;
— it will not be exposed to direct sunlight;
— it will not be exposed to electrostatic discharges

Never place heavy objects on the equipment.

If a foreign body or water does enter the equipment, contact your nearest dealer or service centre.

Do not pull out the plug by pulling on the mains lead, hold the plug.

It is advisable when leaving the house, or during a thunderstorm, to disconnect the equipment from the mains supply.

DOLBY HX PRO

The Dolby HX Pro system consists of a circuit which drastically expands the tape recording performance and greatly improves the high-frequency recording characteristic.

With an ordinary recording circuitry based on a fixed bias system, the use of a small bias during recording can improve the high-frequency MOL, but increases the overall distortion. On the contrary, large bias can decrease distortion but the high-frequency MOL is degraded in this case.

As a result, in case the recorded music contains a large amount of high-frequency component, the effects of the high-frequency component and fixed bias are multiplied resulting in over-bias, which degrades the high-frequency saturation level. This tendency is further enhanced when the recording level is high.

On the other hand, the Dolby HX Pro system detects the high-frequency component contained in the signal to be recorded and controls the recording bias accordingly, so that the saturation level characteristic is improved by reducing the high-frequency bias while maintaining the effective bias for the middle and low frequency components.

This makes it possible to obtain a reproduction performance with enough headroom close to Metal tapes from normal-position tapes.

It is to be noted that, unlike noise reduction systems, the Dolby HX Pro system is a recording bias adjustment system which functions only during recording. Therefore, cassettes recorded with the Dolby HX Pro system can be played back at any other cassette deck.

DOLBY NOISE REDUCTION

The Dolby NR (Noise Reduction) systems reinforce low-level signals in the high and middle frequencies for certain amount during recording, and attenuate these signals for the same amount during playback. As a result, the same signal as the recorded signal can be reproduced, except that the tape hiss noise usually generated in tape recording is reduced largely.

The principle of the Dolby NR system of the C type is similar to the previously-released B type but, while the B type is capable of reducing noise by about 10 dB, the noise reduction performance of the new C type is about 20 dB, which is three times greater than the B type.

Note:

The effect of Dolby B/C NR systems can be obtained only when the same type of NR system is used in both recording and playback. If it is used only in recording or playback, or if different types are used in recording and playback, the high frequencies will be degraded and sound quality will be unnatural.

REAR PANEL CONNECTIONS

All connections to the rear panel should be made with the power to the entire system turned off. To avoid confusion, connect one cable at a time between the different components of your system. This is the safest way to avoid crossconnecting channels or confusing signal inputs with outputs.

① L-OUT AND R-OUT LINE OUTPUTS

For connecting the cassette deck to the inputs TAPE 1 L+R IN or TAPE 2 L+R IN of the amplifier.

② L-IN AND R-IN LINE INPUTS

For connecting the cassette deck to the outputs TAPE 1 L+R OUT or TAPE 2 L+R OUT of the amplifier.

③ REMOTE CONTROL TERMINALS

For the operation of the system remote control, the **REMOTE CONT. IN** jack should be connected to the remote control output jack of your amplifier and the **REMOTE CONT. OUT** jack to the remote control input jack.

The following functions of this Marantz product can be remote-controlled when it is connected with a component incorporating a remote control eye:

Play, ►►, ◄◄, Pause, Stop, Rec, Rec Mute, Counter (Mode, Memo), Direction

However, the remote-controllable functions are dependent on the type of remote control used.

If this Marantz product is to be remote-controlled by a Marantz Learning Remote Control, please refer to the Command Code Table of Figure 1 at the end of this manual.

The connections can be made using RCA-type pin-plug leads available in audio accessory stores.

④ AC POWER SOURCE CONNECTION

With the **POWER** button in the OFF position, plug the mains lead into a mains outlet providing the right voltage.

FRONT PANEL FEATURES

⑤ POWER BUTTON

For switching the unit on and off.

* The mains switch is secondary connected and does not disconnect the entire set from the mains.

⑥ EJECT BUTTON

For opening the cassette holder.

⑦ CASSETTE HOLDER

For the insertion of the cassette.

⑧ CONTROL BUTTONS

A/B button Mechanism select buttons (DECK A/B)

Press to select the deck mechanism, Deck A or Deck B, to be controlled.

When the **DECK A/B** button is pressed, its indicator lights up, and the corresponding deck mechanism can be controlled with the following control buttons. (A deck mechanism cannot be selected if no cassette tape is loaded in it.)

In case of dubbing of the DECK A and DECK B indicators light up, and both deck mechanisms can be controlled regardless of the previous selection.

■ (STOP) button:

Press to cancel any operation modes and stop the tape travel of the deck.

◄/► (PLAY) buttons:

After starting playback, press the forward (►) or reverse (◄) button to select the tape playback direction.

►► (Fast forward button):

Press to start fast tape winding from the left to the right.

The " ►" direction indicator blinks.

◄◄ (Fast rewind button):

Press to start fast tape winding from the right to the left.

The " ►" direction indicator blinks.

II (PAUSE) button:

Press to stop the tape travel temporarily during playback, recording or normal-speed dubbing.

To cancel the Pause mode

Press the **II** (Pause) button again or press the play button, if it is in the Play-Pause mode. Press the **II** (Pause) button again if it is in the Record-Pause mode.

● (REC) button:

Pressing this button engages the rec pause mode and causes the REC indicator to light up. While in this mode, the peak level meters will function, allowing you to monitor the recording level. To initiate recording from the rec pause, press the **PLAY** or **PAUSE** button.

Note:

Prior to recording, check the head direction (► or ◄) indicated by the Direction indicators.

O (REC MUTE) button:

Pressing this button while the deck is in the record mode causes a 4-second blank space to be recorded, after which the deck will enter the rec pause mode.

The **REC MUTE** button is accepted during recording or normal-speed dubbing.

⑨ COUNTER BUTTONS

MEMO buttons

This button used to store the current tape position in the memory. Storing current tape position is useful when one wishes to listen to the current selections repeatedly. After pressing this button, play a selection. When play is completed press the ◄◄ button to rewind or ►► button to faste-forward the tape. The tape is then rewound to the position stored in the memory and stops. If the **MEMO** button is pressed several times, the tape position when it is pressed last will be stored in the memory.

RESET button

Press this button to reset the counter reading "0000".

⑩ CONT PLAY (CONTINUOUS PLAYBACK) BUTTON

Press the **CONT PLAY** button for continuous playback over Decks A and B.

When the button is accepted, the corresponding indicators light up to indicate the Continuous Play mode.

These buttons are accepted while both decks are in the Stop mode, in addition, the **CONT PLAY** button is accepted also when one deck is in the Play mode and the other is in the Stop mode.

The Continuous Playback can be cancelled by pressing the ■ (stop) button or one of the mechanism control buttons.

The Continuous Playback starts from the deck being selected.

⑪ QMS (QUICK MUSIC SEARCH) BUTTON

The QMS system enables you to search the beginning of a specific musical number on a tape containing several musical numbers. First, in the Stop, Play ► or Play-Pause mode, press the **QMS** button for the same count of times as the count of musical numbers to be skipped from the current tape position to the desired musical number. Every time the **QMS** button is pressed, the current QMS count (P-01, P-02, up to P-15) is displayed on the digital counter to indicate that the count is registered. Then, assuming that the current playback direction is forward, press the ◄◄ button to search a musical number located before the current position, or press the ►► button to search a musical number located after the current position. (Press the opposite button when the playback direction is reverse.)

Any of the musical numbers located within 15 numbers before or after the current musical number being played can be searched, provided that the destination is on the same side as the current musical number being played.

When a musical number located before the current position is searched (when the ◄◄ button is pressed), the current musical number being played shall be counted as one.

If the QMS is started from the Stop or Play ► mode, the deck enters the Play mode after the desired musical number has been searched. If the **II** (Pause) button is pressed during QMS operation, the deck enters the Play-Pause mode after the search.

⑫ DISPLAY

ⓐ S.BY INDICATOR
Lights up when the POWER button is OFF.

ⓑ CONT INDICATOR
One of the indicators lights up when the CONT PLAY button is pressed.

ⓒ QMS INDICATOR
Lights up when the QMS button is pressed. Goes off after the desired music has been found.

ⓓ MEMO INDICATOR
Lights up when the MEMO button is pressed on.

ⓔ DECK A AND B INDICATOR
One or both indicators light up to indicate the deck(s) selected.

ⓕ COUNTER FUNCTION/REC LEVEL/DISPLAY MODE
Every time the MODE button (remote commander only) is pressed, the counter display contents are switched from the counter display, to function display and recording level display in the order.

DIGITAL TAPE COUNTERS

The 4-digit summing/subtracting functional counter.

During dubbing, the counters display the tape count of deck B.

ⓖ HIGH, DUBBING INDICATORS
One or both indicators light up to indicate the dubbing speed.

ⓗ DIRECTION INDICATORS
One of the indicators lights up to indicate the direction of the tape heads and the status of the deck mechanism.

When the POWER button is pressed to ON, the indicator corresponding to the current tape travel direction lights up.

When the play ► button is pressed, the tape heads are set for the forward direction, and the "►" indicator lights up.

When the play ◄ button is pressed, the tape heads are set for the reverse direction, and the "◄" indicator lights up.

ⓘ REC INDICATOR
This indicator lights up when the REC button is pressed.

ⓙ PEAK LEVEL INDICATORS
When recording, adjust the recording level with the REC LEVEL (L, R) control so that the red segments do not light up. It is acceptable if the red segments light only at times, but the played sound will be distorted in they light permanently.

⑬ NORMAL/HIGH DUBBING SPEED BUTTONS
These buttons enable you synchronous-start tape dubbing from Deck A to Deck B.

When the NORM button is pressed, the DUBBING indicator lights up and normal-speed dubbing starts.

When the HIGH button is pressed, the HIGH and DUBBING indicator additionally lights up and high-speed dubbing starts and completes in a half time period compared to normal-speed dubbing.

These buttons can be accepted only when both decks are in the Stop mode.

⑭ REC LEVEL CONTROL BUTTONS
- To raise the recording level, press the UP button.
- To lower the recording level, press the DOWN button.
- AUTO button

The AUTO control button can be pressed while the unit is in record-pause mode.

The AUTO indicator blinks on the display during the automatic level control operation and the display returns to the previous condition after completion of the operation.

The automatic level control operation consists of detecting the peak level of the music to be recorded and setting the optimum recording level automatically.

More correct level control will be possible if the cassette deck is combined with a CD player equipped with the peak search function (Marantz CD-43/53/63).

⑮ TIMER/SYNC REC SWITCH
PLAY:

By using a commercially available audio timer, this function will permit timer-activated playback.

REC:

By using a commercially available audio timer, this function will allow you to carry out unattended recording.

OFF:

When the audio timer it not is use, set to this position.

SYNC REC:

If the unit is connected with a Marantz CD player featuring the Synchro Recording function, synchronous recording with the start of CD player is made possible by connecting it to the REMOTE CONT. BUS jacks on the rear panel of this unit. Set the switch in this case to the PLAY position.

⑯ DOLBY B/C NR SELECT SWITCH
This switch is to be operated when recording using Dolby NR or playing a tape recorded with Dolby NR.

Set the switch to B NR or C NR according to the Dolby NR system.

⑰ REVERSE MODE SWITCH
With this switch you can select the tape travel mode to tape recording or playback.

⇄ :

Select this mode to play or record only in the forward (►) or reverse (◄) direction on a tape side.

⇉ :

Select this mode to play or record in two ways.

When playback (recording) is started from the ► direction, playback (recording) is cancelled at the tape end in the ◄ direction, and the deck enters the Stop mode.

When playback (recording) is started from the ◄ direction, it is cancelled at the tape end and the deck enters the Stop mode.

↻ :

Select this mode for Continuous Playback.

Regardless of the ► or ◄ direction with which playback is started, it continues until the ■ (Stop) button is pressed.

If recording is started in this mode, the same recording operation takes as place in the ⇉ mode.

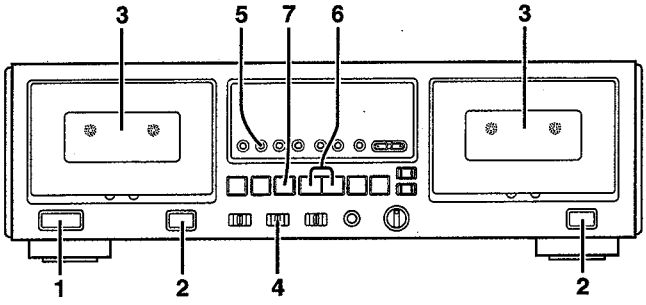
⑱ MIC (microphone) JACKS
This signal picked up by the microphones is input to this jack and mixed with the line input signal. Adjust the total input level using the REC LEVEL control.

⑲ MIXING LEVEL CONTROL
The mixing level control is used to very the level of the microphone signals. When no microphone is connected, the mixing level control should be turned to the MINIMUM position to reduce noise on recordings.

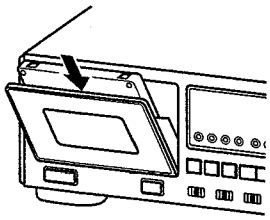
OPERATION

PLAYBACK

PLAYBACK ON ONE DECK
(Same procedure for Deck A and Deck B)



Place a cassette on the cassette tray with the head and pinch roller insert openings facing toward the inside on the unit.



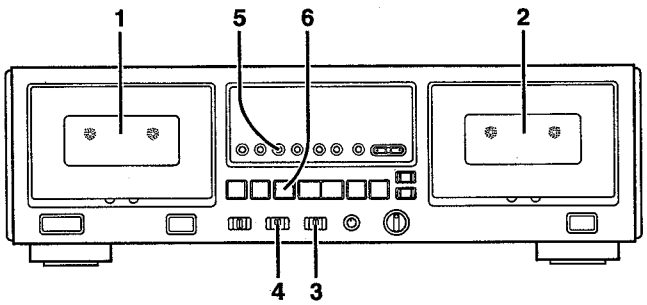
1. Press the **POWER** button to ON.
2. Open the cassette holder by pressing the **EJECT** button.
3. Insert a recorded cassette in the cassette holder with the side to be played facing toward you. Then close the cassette holder.
4. Select the Dolby NR system as desired.
5. Reset the counter with the **RESET** button.
6. Press the **PLAY** button.
   To play in the forward direction, press the **PLAY** ► button. To play in the reverse direction, press the ◄ **PLAY** button. "PLAY" appears in the display (in the function mode).

To play in the forward direction.

To play in the reverse direction.

7. Press the ■ (Stop) button to stop playback.

CONTINUOUS PLAYBACK
Continuous Playback from Deck A to Deck B



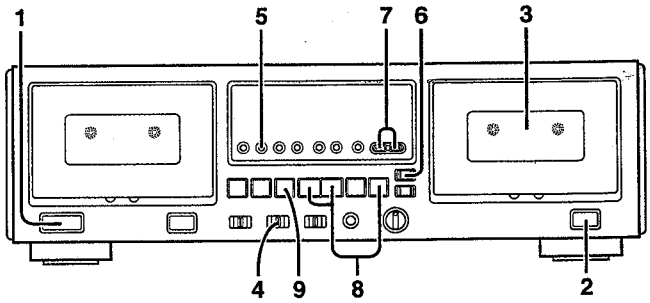
1. Insert a recorded cassette in the cassette holder of Deck A with the side to be played facing toward you. Then close the cassette holder.
2. Also insert another recorded cassette in Deck B in the same way as Deck A.
3. Set the **REVERSE MODE** switch to the required position.
4. Select the Dolby NR system as desired.
5. Press the **CONT PLAY** button.
   The Continuous Playback starts, and the CONT PLAY indicator lights up to indicate the Continuous Play mode.
- When the tape in Deck A has been played, the tape in Deck B starts to be played automatically.
  Before starting Continuous Playback, the head direction of Deck B should also be set to the desired direction in the same way as Deck A.

6. To stop playback, press the ■ (Stop) button.
- The **CONT PLAY** button is accepted when both Decks A and B are in the Stop mode, or when one deck is in the Play mode and the other deck is in the Stop mode.

Continuous Playback from Deck B to Deck A

For Continuous Playback from Deck B to Deck A, select Deck B by pressing the **DECK B** button to start playback from Deck B. After this step, the button operations are the same as with Continuous Playback from Deck A to Deck B.

RECORDING (DECK B ONLY)



1. Press the **POWER** button to ON.
2. Open the cassette holder by pressing the **EJECT** button.
3. Insert the cassette tape, then close the cassette holder.
4. Select the Dolby NR system as desired.
5. Reset the counter with the **RESET** button.
6. Press the **REC** button.
   At this point, check the tape travel direction with the DIRECTION indicator. The direction can be changed by pressing the corresponding **PLAY** button. The direction can be changed only in the rec pause mode.
7. Adjust the recording level with the **REC LEVEL** buttons so that the red segments of the peak level meters light up only occasionally.
8. Press the **PAUSE** or **PLAY** button to start recording.

Quick rewind

If the fast winding button (◄◄ or ►► button) is pressed directly after recording, the tape is automatically wound to the position where the recording was started, and the deck enters the Stop mode.

This function is convenient for replaying the recording or for starting recording again.

Auto rec muting

For eliminating commercials or talking when recording from an FM broadcast or for leaving spaces between selections during tape dubbing, a non-recorded blank of about 4 seconds can be inserted with a one-touch operation, after which the deck enters the rec pause mode.

9. Press the ■ (Stop) button to stop playback.

DUBBING
(from Deck A to Deck B)

1. Insert a recorded tape to be played in Deck A.
2. Insert a tape to be recorded in Deck B.
   Take care of the following when selecting the tape to be recorded.
- The protection tabs must not be broken.
- The length should be the same as the tape to be played as far as possible.
  If the lengths of two tapes are different, dubbing could be interrupted in the middle of music.

3. For Normal-Speed Dubbing, press the **NORM** button.
   Deck A enters the Play mode, Deck B enters the Record mode, and normal-speed dubbing from Deck A to Deck B starts.
4. For High-Speed Dubbing, press the **HIGH** button.
   Synchronous dubbing at double speed from Deck A to Deck B starts.
   The HIGH and DUBBING indicators light up indicating the High-speed Dubbing mode.

Notes:

Dubbing starts immediately after the button is pressed. Ensure that there is no problem in erasing the content of the tape in Deck B before starting dubbing.

The **II** (Pause) and **REC MUTE** buttons are not accepted during High-Speed Dubbing.

To stop dubbing in the middle:

Press the ■ (Stop) button. The dubbing will be cancelled and both Decks A and B enter the Stop mode.

SYNCHRO RECORDING

Synchro Recording is only possible if the unit is connected with a Marantz CD player featuring the Synchro Recording function.

Synchro Recording is enabled through the connection of the **REMOTE CONT. BUS** jacks (rear panel). (See Figure 6.)

1. Load a tape to be recorded.
2. Set the deck to the rec pause mode.
3. Set the **TIMER** switch to PLAY.
4. Start playing the CD player.

The tape recording will start at the same time. It stops at the same time as the CD player stops playback.

Synchro Recording with the CD player will not occur if the **TIMER** switch is in the OFF position.

Note:

If any key other than the button described below is pressed during sync recording, the sync recording will be canceled. (This does not apply to the **A/B** button for selecting deck A and the **FF** and **REW** keys for winding the tape).

- With new CD player models released in '93 or later, if the **REVERSE MODE** switch is set to " ⇄ " before starting synchro-edit recording, automatic edit recording on both tape sides A and B is possible.
  (CD-43/CD-53/CD-63)
- With CD player models released in '92 or before, the **REVERSE MODE** switch should be set to " → " before starting synchro-edit recording. (This results in an edit recording of one tape side.)
  (CD-72/CD-52/CD880J)

RECORDING/PLAYBACK WITH TIMER

For connection for unattended timer recording and timer playback, refer to the instructions supplied with your audio timer.

Notes on timer recording/playback

- Some audio timers available on the market are turned off automatically 59 minutes after their power has been turned on. For details, read the instruction manual supplied with your audio timer carefully .
- If the **POWER** button is pressed ON while the **TIMER** switch is set to REC, even though Timer Recording is not required, the deck will go straight into the Record mode. To prevent this, be sure to set the **TIMER** switch to OFF when Timer Recording is not required.

Timer Recording

By attaching an audio timer to this unit, radio broadcasts can be recorded while you are absent or sleeping.

1. Set the audio timer to the ON position, and set the **TIMER** switch of this unit to OFF (centre position).
2. Set the power of your stereo system to ON, and tune the tuner into the radio station to be recorded.
3. Set the **POWER** button to ON, and load the cassette to be recorded on the cassette holder.
   Press the **REC** button to enter the rec pause mode, Then adjust the recording level by pressing the **REC LEVEL** control buttons so that the red segments of the peak level meters light up only it intervals. After the level setting, set the deck to the stop mode.
4. Set the **TIMER** switch to REC.
5. Set the audio timer to the AUTO position, and set the start time and stop time.
6. When the start time set above comes, the powers to all required components will be turned on and recording will starts. When the tape has been wound to the end, the tape travel will be stopped by the auto shut-off function, then the power to this unit and the stereo system will be turned off by the timer.

Timer Playback

1. Set the audio timer to the ON position, and set the **TIMER** switch of this unit to OFF (centre position).
2. Insert the cassette tape, then close the cassette holder.
3. Set the power of your stereo system to ON, and adjust the playback level of the tape to be played.
4. Set the **TIMER** switch to PLAY.
5. Set the audio timer to the AUTO position, and set the start time and stop time.
6. When the start time set above comes, the power to all required components will be turned on and playback will start. When the tape has been wound to the end, the tape travel will be stopped by the auto shut-off function, then the power to this unit and the stereo system will be turned off by the timer.

Note:

When switched on, the tape direction of this unit will always be forward (►).

For timer recording, be sure to use a tape that can be recorded.

PROPER RECORDING LEVEL

One of the beauties of music is its dynamic range, in other words, the contrast between very soft and very loud passages. To capture this contrast on tape, the recording levels have to be set so that the loudest passages do not saturate the tape and cause distortion. Yet the recording levels should not be set too low or the soft passages will simply disappear in the residual noise.

If, for example, you are recording from a record, you should at the outset find the loudest section of the record. Load a cassette in your tape deck and press the **REC** buttons. You can thus adjust the recording level without actually recording on the tape.

Start the record again at the beginning and depress the **PLAY** or **PAUSE** button to commence recording. If after setting the recording levels as explained above the record begins with a soft musical passage, do not give in to the temptation of raising the levels. Bear in mind that the level readings, when related to actual loudness levels, fall into the following categories:

Broadcast human voice:	from −10 dB to −5 dB
Loud music (fortissimo):	Approximately +1 dB
Soft music (pianissimo):	Approximately −15 dB
Average music level:	from −10 dB to −5 dB

CLEANING THE HEADS

If the tape heads are allowed to become dirty, there will be problems such as poor sound quality, poor volume, intermittent sound, failure to erase previous recordings and failure to record. In order to prevent this happening, clean the heads after every 10 hours of operation.

Also, remember to clean the heads before recording a particularly valuable tape or after playing an old tape.

Head Cleaning Method

We recommend the use of a cleaning cassette. For instructions on how to use it, please refer to the user guide of your cleaning cassette.

Demagnetize the heads.

After a long period of use, the metallic parts and heads which come into contact with the tape will be magnetized and problems such as an increase in noise or faded high frequencies may result. It is recommended that the heads and other metallic parts which come into contact with tapes be demagnetized after every 20 to 30 hours of use using a cassette head demagnetizer in the from shape of a cassette.

Note:

As noise is produced during demagnetization, reduce the amplifier volume before starting.

AUTO TAPE SELECTOR

This unit is equipped with an auto tape selector which automatically sets the bias and equalizer levels using the detection holes provided in the cassette shell. The bias and equalizer levels are automatically set according to the type of tape as follows. (See Figure 2.)

- Normal tapes: EQ; 120 μs, Bias; Low
- CrO_2 tapes: EQ; 70 μs, Bias; High
- Metal tapes: EQ; 70 μs, Bias; Metal

In some metal tape cassettes, the metal detection holes are not provided. With these cassettes, the CrO_2 tape type indicator lights up and the recorded sound may be distorted.

MAKING OPTIMUM CASSETTE RECORDINGS

TYPE AND BRAND OF TAPES TO USE

In cassette recording, the type and brand of cassette you use has a great influence on the quality of your recordings. Therefore, it is worthwhile purchasing the highest-quality cassette available. Chromium dioxide (CrO_2) and metal tapes generally provide better fidelity than normal, ferric oxide tape.

We recommend the use of cassettes with a recording capacity of 90 minutes or less. In production, the performance of our cassette decks is tested using the following tapes.

Type of Tape	Ref. No.	Market Name
Normal	TDK AC224 (C-60)	TDK AD
Special/CrO_2	TDK AC513 (C-60)	TDK SA
Metal	TDK AC712 (C-60)	TDK MA TDK MAR

TO PROTECT VALUABLE RECORDINGS

In the record mode, information previously recorded on the tape will automatically be erased. To prevent this from happening, use a small screwdriver to break out one or both safety tabs (see Figure 3 for side A). It is possible to restore the recording capability of either side of the cassette by covering the opening with plastic tape (see Figure 4 for side A).

NOTES ON INSTALLATION

When the deck is installed on or near other audio equipment hum sometimes occurs. Position the equipment so that the hum ceases. Always install the unit horizontally.

This model incorporates a high-performance microprocessor. In the event of malfunction due to static electricity, etc., turn off the POWER, and after 30 seconds turn it on again.

TROUBLESHOOTING

If you think a malfunction has occurred, first check the points listed below, The problem is likely to have been caused by a simple operational error or a connection problem. If the problem cannot be corrected even after carrying out the following checks, consult your dealer or nearest Marantz sales office or service counter.

• The tape is not moving.

1. Is the mains lead plugged in properly?
2. Is the POWER button ON?
3. Is the PAUSE ⏸ button set to the pause mode?

• The tape is moving but no sound is heard.

1. Is the cassette recorded?
2. Are the amplifier and speakers connected properly?
3. Is the amplifier's volume control set at the minimum level?

• Recording is not possible.

1. Is there a cassette in the unit?
2. Has the wrong recording protection tab of the cassette broken?
3. Is the recording level set properly?

• Sound is distorted.

1. Was the recording level too high?
2. Are the heads clean?

• Sound is irregular.

1. Is the tape head clean?
2. Are the pinch rollers (capstans?) clean?
3. Is the cassette tape defective?
4. Is the tape wound irregularly?

• Noise is heard.

1. Is the tape head clean?
2. Is the tape head demagnetized?
3. Is the cassette tape defective?
4. Is the DOLBY NR system button set properly according to the tape being played?

• Hum interferes with the sound.

1. Are the connection leads connected properly?
2. Is there any source of magnetism (TV, motor, transformer, etc.) present near the unit?
3. When this unit is stacked on or under a certain type of amplifier, hum noise may be picked up. It so, position the two units so that there is no mutual interference. This also applies if the unit is installed near a TV set.
4. Unplug the mains plug from the mains outlet and plug in the other way around to reverse the polarity.

CARE AND MAINTENANCE

This section describes the care and maintenance tasks that must be performed to optimize the operation of your Marantz equipment.

CLEANING OF EQUIPMENT EXTERNAL SURFACES

The exterior finish of your deck will last indefinitely with proper care and cleaning. Never use scouring pads, steel wool, scouring powders or harsh chemical agents (e.g., lye solution), alcohol, thinners, benzine, insecticide or other volatile substances as these will mar the finish of the equipment. Likewise, never use cloths containing chemical substances. If the equipment gets dirty. wipe the external surfaces with a soft, lint-free cloth.

If the equipment becomes heavily soiled:

— dilute some washing up liquid in water, in a ratio of one part detergent to six parts water

— dip a soft, lint free in the solution and wring the cloth out until it is damp.

— wipe the equipment with the damp cloth.

— dry the equipment by wiping it with a dry cloth.

REPAIRS

Only the most competent and qualified service technicians should be allowed to service the equipment. The Marantz company and its factory-trained warranty station personnel have the knowledge and special facilities needed for repair and calibration of this precision equipment. After the warranty period has expired, repairs will be performed for a charge if the equipment can be returned to normal operation.

In the event of difficulty, refer to your dealer or write directly to the nearest location to you that is listed on the Marantz Authorized Service Station list. If writing, please include the model and serial number of the equipment together with a full description of what you think is abnormal about the equipment's behavior.

	D-BUS CODE		D-BUS CODE
PLAY	1853	0	1800
►► (FF)	1852	1	1801
◄◄ (REW)	1850	2	1802
PAUSE	1848	3	1803
STOP	1854	4	1804
REC	1855	5	1805
REC MUTE	1842	6	1806
COUNTER MEMO	1841	7	1807
NEXT	1832	8	1808
PREVIOUS	1833	9	1809
POWER ON/OFF	1812		
CONT	1836		
DECK A	1844		
DECK B	1846		
DIRECTION	1847		
COUNTER MODE	1815		

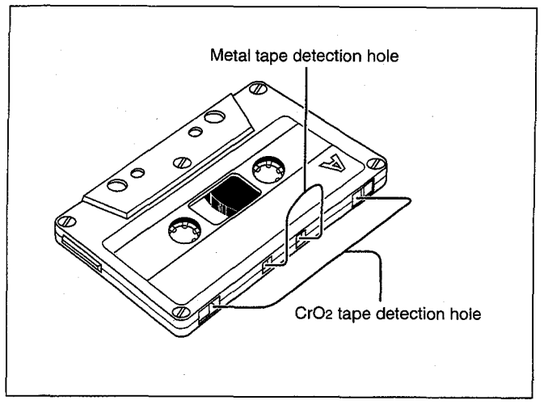


Figure 2

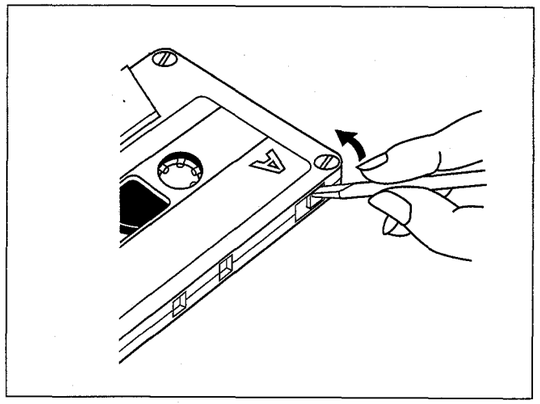


Figure 3

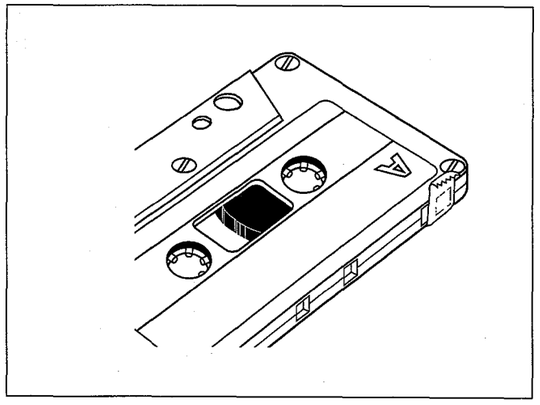
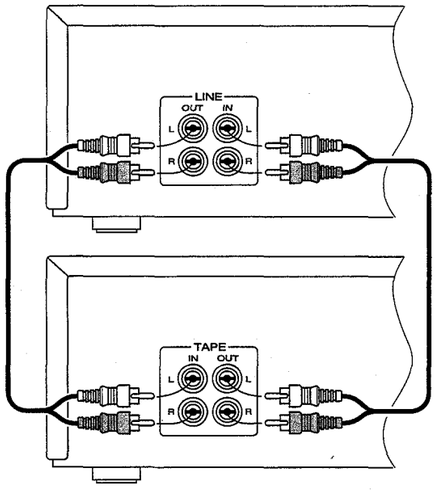


Figure 4

REAR PANEL SIGNAL CONNECTIONS

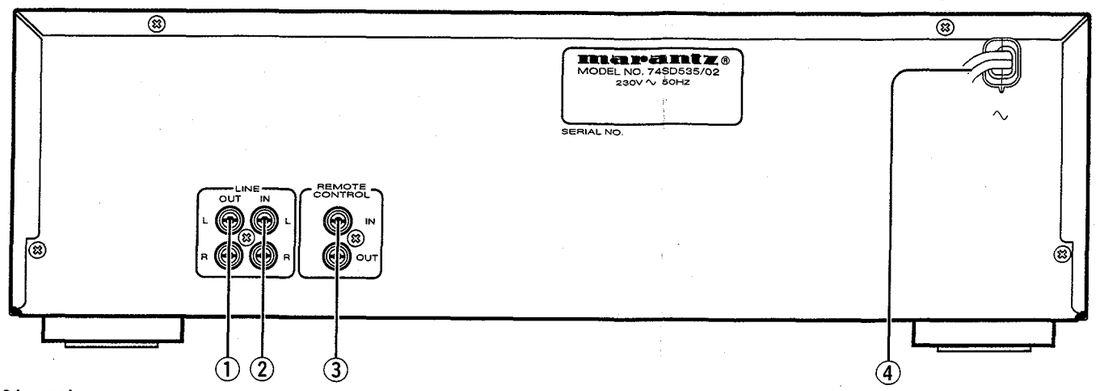
YOUR STEREO CASSETTE DECK



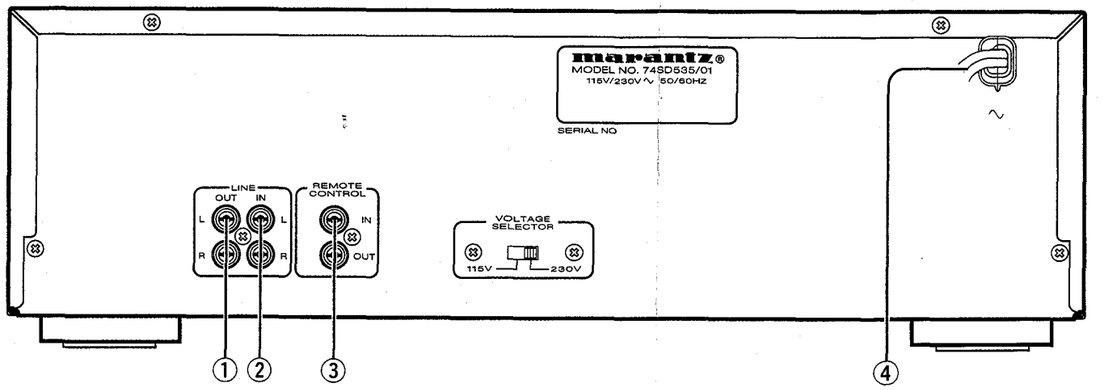
Your amplifier or receiver

Figure 1

/02 version



/01 version



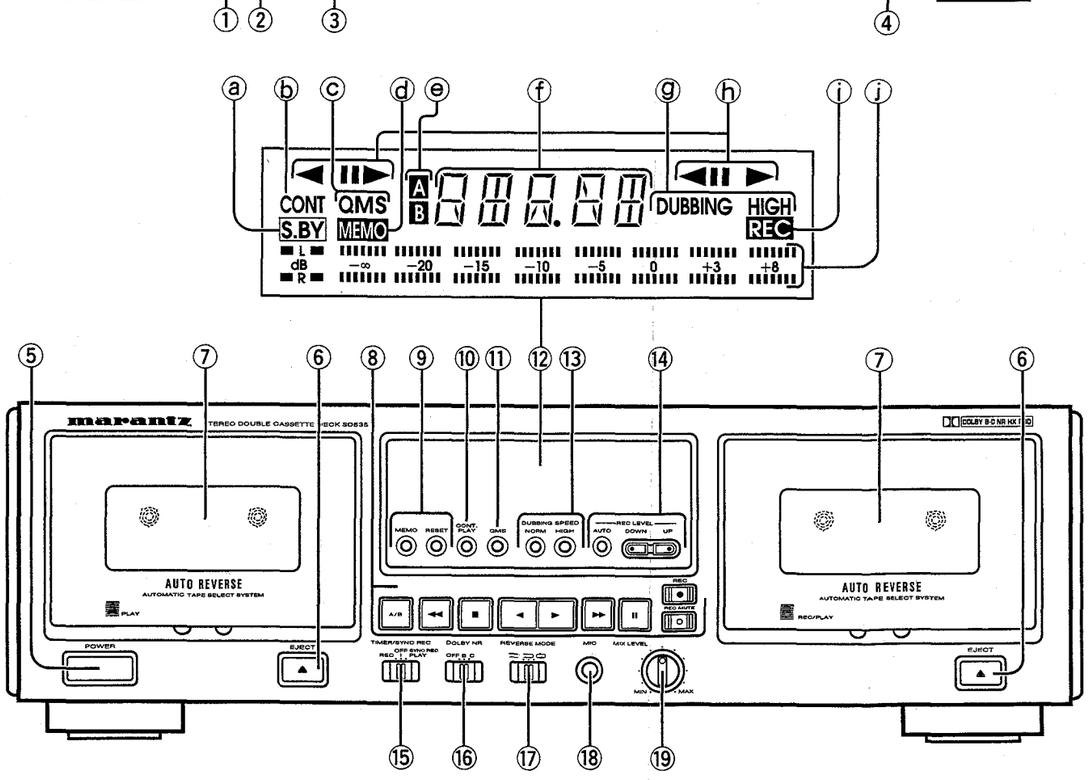


Figure 5

D-BUS remote connection

It is possible to connect with the RCA pin cord.

Connexion pour télécommande D-BUS

Il est possible de connecter avec le câble à broches RCA.

D-BUS-Fernbedienungsanschluß

Anschluß mit dem Cinchsteckerkabel ist möglich.

Collegamento di telecomando via barra collettrice D-BUS

Il collegamento può essere effettuato con un cavo con spinotti RCA.

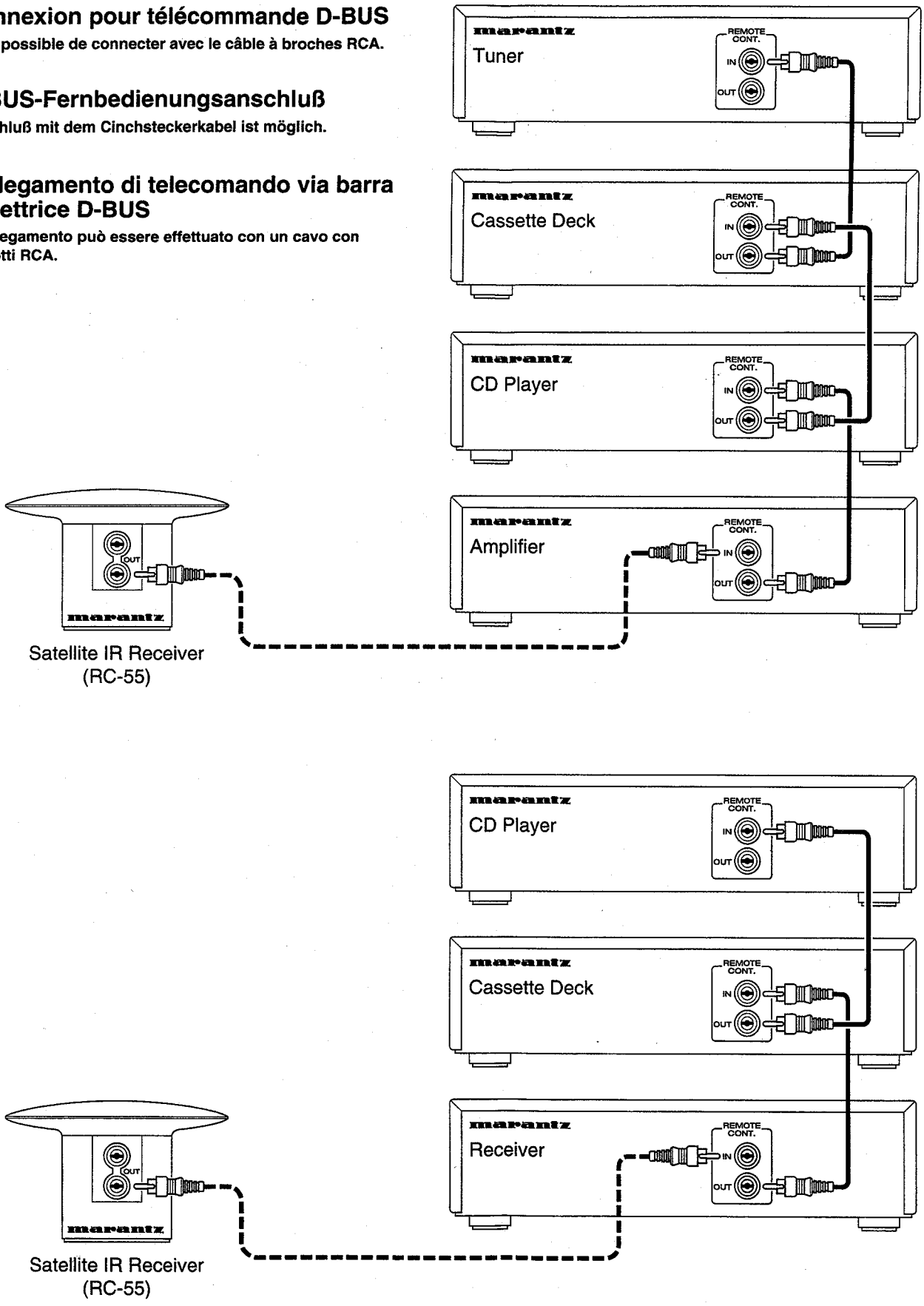


Figure 6